From: PETERSON Jenn L
To: Eric Blischke/R10/USEPA/US@EPA
Subject: Comment Clarification
Date: 08/15/2008 01:56 PM

Here are the two I had comments on:

Comment #443: Sorry, I think this comment is confusing, and I had to try and remember over a year back to my review of the document. We collected sediment at the beach areas during breeding season to address shorebird exposure directly. For the shorebird dietary model we need sediment concentration for sediment ingestion and a prey concentration. The issue is how to best represent the shorebird invertebrate concentration from these areas. We have some in-water data that may represent the beach areas if they are relatively co-located, or we will have to estimate tissue concentrations by a modeling technique. They estimated the prey concentration but taking tissue conc. in the river where it was collected and used the food web model also to estimate prey concentrations for dioxin TEQ, PCB TEQ, total PCBs, sum DDD, sum DDE, sum DDT, total DDTs, and aldrin. My comment was that a BSAF should be explored such that an invertebrate prey is estimated from the concentrations at the beach locations, since this is where they will be feeding. These BSAFs can be taken from relationships in the co-located worm and /or clam and sediment data specific to each contaminant and each dioxin or PCB dioxin like congener. From each of these relationships a total TEQ (something they didn't do in the Round 2 Report) can be calculated for invertebrates in these areas. I don't think they should be using the food web model for this (one option they used). Another option would be to use the tissue data we have if it is located close to the beach area.

Appendix G, Wildlife RA, Page 146, Section 5.2.1.2.1, Spotted Sandpiper, Site Use and Exposure Area: Dioxin like PCBs were analyzed at most beaches (13) and dioxins and furans were analyzed for at 26 of the beach locations. Therefore an exposure analysis to “TEQ” can be performed instead of using the co-located clam and worm data. The clam and worm data were collected in-river and not in the beach areas. **PCB TEQ, dioxin TEQ and a total of dioxin like PCBs and dioxins and furans should be evaluated using this data (not just PCB TEQ and dioxin TEQ presented separately)**. See Table 4-1 in the Round 2A Site Characterization Report dated July 17, 2005 for a complete list of analytes and detections.

Comment # 468: The LWG response and resolution implies that instead this is a sediment / predictive model issue that is dependent on the "alkylated PAH" analysis for sediment. However, my comment was specific to TZW screening for benthic invertebrates that was presented in Section 4.2 of Attachment G (Screening Assessment for Benthic Invertebrates). At the time we didn't have water TRVs, so the comment simply indicated they shouldn't be dropped, but instead carried forward in the screen. EPA has since provided water SLVs in your April 11 letter, and they should be using these number to evaluate TZW concentrations. These include values for PAHs as well as for TPH. I do not believe we are analyzing for alkylated

PAHs in TZW. Here is my original comment and where you can find it in the Round 2 Report.

Attachment G2, Invert RA, Page 12, Section 4.2, Identification of Round 2 COPCs for TZ water and Tables 4-3 and 4-4: TPH including diesel-range hydrocarbons, gasoline-range hydrocarbons, residual-range hydrocarbons and TPH were all identified as COIs for benthic invertebrate receptors based on TZW data (table 4-3). However, they were not evaluated in the Round 2 COPC screen because "LWG and EPA are currently discussing the TPH Eco SLs and TPHs". These should be carried forward in the screen, and represent an effects data gap. Where we have detected concentrations of these contaminants without TRVs, additional effects assessment such as bioassays may be required.

Let me know if this makes sense, or if it would help to discuss.

-Jennifer